JUL 1 9 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No. : 10/802,505 Confirmation No. 3671

Applicants : Sherif Safwat, et al.

Filed : March 16, 2004

Title : CELL DESIGN FOR A TRAWL SYSTEM

AND METHODS

TC/A.U. : 3643

Examiner : Darren W. Ark

Docket No. : 2195CON2 Customer No.: 23320

Commissioner for Patents Post Office Box 1450

Alexandria, Virginia 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

To fully discharge Applicant's duty of good faith and candor under 37 C.F.R. § 1.56 during prosecution of the patent application identified above, Applicant hereby:

- identifies references on an accompanying "Information
 Disclosure Statement by Applicant" form PTO/SB/08A; and
- 2. submits the accompanying copies of the references identified therein.

///
///
///
///
///
///
///

///



Appl. No. 10/802,505 Response Dated July 16, 2004 Reply to June 25, 2004 Office Action

Applicant believes that no fee is required for filing the accompanying "Information Disclosure Statement by Applicant" form PTO/SB/08A. However, if any fee is due, the Commissioner for Patents is hereby authorized to charge such fee to Deposit Account No. 19-0735. A duplicate copy of this transmittal letter is enclosed herewith.

Respectfully submitted

Donald E. Schreiber

Reg. No. 29,435

Dated: $\frac{16}{10}$, 2

Donald E. Schreiber

A Professional Corporation

Post Office Box 2926

Kings Beach, CA 96143-2926

Telephone: (530) 546-6041

Attorney for Applicant(s)

PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Option the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

6

Sheet 1 of

Complete if Known					
Application Number	10/802,505				
Filing Date	March 16, 2004				
First Named Inventor	SAFWAT, Sherif				
Group Art Unit	3643				
Examiner Name	Darren W. Ark				
Attorney Docket Number	2195CON2				

				U.S. PATENT DOCUM	MENTS	
Examiner Initials*	Cite No.1	U.S. Patent Number	Document Kind Code ² (# known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		1,026,	544	YAMAMOTO	05/14/12	1 30,00
		1,552,	269	BROCKER	09/01/25	- <u>-</u>
		1,689,		EVANS	10/23/28	
		1,695,	595	LARNED	12/18/28	
		1,897,	224	ANDREWS	02/14/33	
		2,162,	115	PAULS	06/13/39	
		2,511,	057	GUTHRIE, et.al.	06/13/50	
	Ť	2,590,	586	THOMPSON, Jr., et.al.	03/25/52	
	Ì	2,792,		HALLER	05/21/57	
		2,816,	386	HARRIS, et.al.	12/17/57	
		2,823,	576	NEEDHAM, et.al.	02/18/58	
		2,999,	413	MOMOI	09/12/61	
		3,041,	915	RYFFEL	07/03/62	
1	1	3,102,	357	LUKETA	09/03/63	
	ì	3,129,	632	STARR	04/21/64	
		3,131,	501	LUKETA	05/05/64	
		3,153,	297	GRABOWSKY	10/20/64	
		3,308,	567	LUKETA	03/14/67	
		3,369,	317	BROWNELL	02/20/68	
		3,606,	815	YAMASHITA, et.al.	09/21/71	

				FOR	EIGN PATENT DOCUMENT	rs		
Examiner Initials	Cite No.1	Office ³		ind Codes	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant	тв
		DE	354325	# known) 3 A1	Perevoschikov, et al.	MM-DD-YYYY 06/1987	Figures Appear	┼
		FR	252106	5	Cassert, et al.	08/1983		T
		JP	57-1366	0		03/1982		\top
•		JP	59-7163	0		04/1984		+
		JP	60-3063	0		02/1985	······································	十一
		JP	60-3978	2	Horie	03/1982		+
		JP	60-8816	0		05/1985		1-
		JP	60-13986	0		07/1985		†
		JP	61-38	6	Horie	08/1986		

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute fo	or form 1449A/i	РТО		С	omplete if Known	
				Application Number	10/802,505	
INFO	RMATIO	N DI	SCLOSURE	Filing Date	March 16, 2004	
STAT	EMENT	BY A	APPLICANT	First Named Inventor	SAFWAT, S.	
				Group Art Unit	3643	
(u	se as many s	heets a	s necessary)	Examiner Name	Darren W. Ark	
Sheet	2	of	6	Attorney Docket Number	2195CON2	

			U.S. PATENT DOC	JMENTS	
Examiner nitiels*	Cite No.1	U.S. Patent Document Kind Code Number (#known)	or Cred Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		4,356,654	TREKEL, et. al.	11/02/82	
		4,378,725	HOSPERS, et al.	04/05/83	
		4,457,959	DORNHEIM, et al.	07/03/84	
		4,466,331	MATHESON	08/21/84	
		4,521,986	KOGA	06/11/85	
		4,619,108	HOTTA	10/28/86	
		4,947,727	MOMOI	08/14/90	
		5,339,657	McMURRAY	08/23/94	
		5,453,190	MARTIN, SR.	09/26/95	
		5.622,094	REXROAD	04/22/97	
		5,694,755	FRØYSTAD	12/09/97	
		5,752,459	REXROAD	05/19/98	
		5,860,350	REXROAD	01/19/99	
		6,374,531 B1	SAFWAT, et al.	04/23/02	
			·	 	
			ļ		
			1	1	

		F	Foreign Patent Docu	ment	Name of Batastan	Date of Publication of	Pages, Columns, Lines,	Т
Examiner Initials	Cite No. ¹	Office ³	Number ⁴	Kind Code ⁵ (# known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Floures Appear	Τ,
		RU	5248	376	Aljoshin, et al.	11/1976		Т
		RU	14449	981		12/1986		T
		RU	14807	792 A1	Perevoschikov, et al.	05/1989		†
		WO	91/016	 	Theret, et al.	02/1991		
		WO	95/064		Carlsen, et al.	03/1995		1
		WO	97/134	407	Safwat, et al.	04/1997		L
				_				╁╌
								†

Examiner	Date	
Signature	Considered	1

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English tanguage Translation is attached.

PTO/SB/08B (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Subatitut	e for form 1449B.	/PTO		Co	omplete if Known
				Application Number	10/802,505
INFO	PRMATIC	ON D	ISCLOSURE	Filing Date	March 16, 2004
STATEMENT BY APPLICANT				First Named Inventor	SAFWAT, Sherif
			Al I LIOANI	Group Art Unit	3643
	(use as ma	ny sheet	s as necessary)	Examiner Name	Darren W. Ark
Sheet	3	of	6	Attorney Docket Number	2195CON2

	7	OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	_
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	172
		Batill, S. M., et al., "An Experimental Investigation of the Flow Field	Γ
		Around Yawed Stranded Cables," Contract No. N00014-83K-0239,	
		Rept. No. CR 2210-89-1, University of Notre Dame, Notre Dame, Indiana (1989)	
		Batill, S. M., et al., "Flow Field Studies on Yawed, Stranded Cables," in Flow Visualization, Reznicek V. R. ed., Hemisphere Publishing Corp.,	
		pp.391-396 (1990)	
		Batill, S. M., et al., "Detailed Near Surface Flow ABout Yawed, Stranded Cables", Contract No. N00014-83K-0239, Rep. No. CSS CR 1210-92-1,	
		University of Notre Dame, Notre Dame, Indiana (1992)	
		Breidenthal, R., Phus. Fluids, Vol. 23, No. 10, p. 1931 (1980)	
		Cermak, J.E., "Aerodynamics of Buildings," Annual review of Mechanics 8 p. 99 (1976)	
		Diggs, J. S., "Hydrodynamic Characterization of Various Towed Array Towcables," Tech. Rpt. No. 128, Contract No. N00600-73-D-1077,	
		Mar, Incorporated (1974)	
		Endeco, Inc., "Haired Faired Cable," Endeco Towed Systems (date unknown)	

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside	this box 🛶	+
------------------------------------	------------	---

Pro/se/08B (10-96)

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute f	for form 1449B/	'PTO		Complete if Known		
				Application Number	10/802,505	
INFO	RMATK	ON DIS	CLOSURE	Filing Date	March 16, 2004	
STAT	'EMEN'	T RY A	PPLICANT	First Named Inventor	SAFWAT, Sherif	
JIAI			LIOAN	Group Art Unit	3643	
	(use as mai	ny sheets as i	necessary)	Examiner Name	Darren W. Ark	
Sheet	4	of	6	Attorney Docket Number	2195CON2	

	I	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the	7			
Examiner Initials	Cite No.1	item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T			
	Flugwiss, Z., Weltraumforsch 14, p. 40 (date unknown)					
		Garner, J. "How to Make and Set Nets or The Technology of Netting," Fishing News Books Ltd., 1962				
		Hoerner, S. F., "Fluid-Dynamic Drag," published by author, pp. 3-2 and 4-4 (1965).				
		Hoerner, S. F., "III-Pressure Drag," published by author, pp. 3-7,3-9, 3-11 and 3-27 (1965).				
		Hoerner, S. F., "IV-Structures," published by author, p.4-5 (1965).				
<u></u>		Hunt, J. C. R., "Industrial and Environmental Fluid Mechanics," Annual Review of Fluid Mechanics 23, pp. 10-12 (1991).				
		Klust, G., "Netting Materials for Fishing Gear", Fishing News Books Ltd., 1973				
		"Knuckleballs," Scientific American, p. 22 (1987)				
		Lisoski graph, Fig. 7, Experimental Lift and Drag Histories for Bluff Plate, p. 95 (1993).				
		Mehta, R. D., "Aerodynamics of Sports Balls," Ann. Rev. Fluid Mech. 17:151-189 (1985).				
		Nebres, J. V., "Flow Around Yawed Stranded Cables," Master's Thesis, University of Notre Dame, Notre Dame, Indiana (1989).				

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box =	→	+
---	---	---

PTO/S8/08B (10-96)

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Subatite	te for form 1449B/PI	0		Complete if Known			
				Application Number	10/802,505		
INF	ORMATIO	NC	ISCLOSURE	Filing Date	March 16, 2004		
STA	TEMENT	RY	APPLICANT	First Named Inventor	SAFWAT, Sherif		
017	,,		ALLEIOAIT	Group Art Unit	3643		
	(use as many	sheet	's as necessary)	Examiner Name	Darren W. Ark		
Sheet	5	of	6	Attorney Docket Number	2195CON2		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
		Nebres, J. V., "Wake Similarity and Vortex Formation for	
		Two-Dimensional Bluff Bodies," Doctoral Dissertation, University	
		of Notre Dame, Notre Dame, Indiana (1992)	
		Oceanographic Ribbon Fairing Cable, The Rochester Corporation, Cat-82 (date unknown)	
		Roshko, A., "Perspectives on Bluff Body Aerodynamics," Second International Colloquium on Bluff Body Aerodynamics	
		and Application, Melbourne, 7-10, pp. 81 (1992)	
		"On the Persistence of Transition in the Near-Wake," pp. 607 and 609. Problems of Hydrodynamics and Continum Mechanics, Soc.	
		Industrial and Appl. Math., Philadelphia (1969)	
		"Examples of Spectrum products, specific projects and end-users," Spectrum Ocean Systems Limited, Peterborough, Ontario	
		(date unknown)	
•		"Fairing and Anti-Stacking Ring Assemblies for Tow Cables," Spectrum Ocean Systems Limited, Peterborough, Ontario (date unknown)	
		Williamson, C. H. K., "Oblique and Parallel Modes of Vortex Shedding in the Wake of a Circular Cylinder at Low Reynolds Numbers," Journal of Fluid Mechanics 206:595 and 597, 1989	

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Please type	a pius	sign (+)	inside this	pox	→	+
-------------	--------	--------	----	-------------	-----	----------	---

PTO/SB/08B (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Subatitute	e for form 1449B	/PTO		Complete if Known			
-				Application Number	10/802,505		
INFC	PRMATIC	on dis	CLOSURE	Filing Date	March 16, 2004		
QTA'	TEMEN	T RY A	PPLICANT	First Named Inventor	SAFWAT, Sherif		
סות		וטוא	LIOAITI	Group Art Unit	3643		
	(use as mai	ny sheets as	necessary)	Examiner Name	Darren W. Ark		
Sheet	6	of	6	Attorney Docket Number	2195CON2		

	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
		The Zippertubing Co. product data sheets and bulletins for DVH-20 AND DVH-40 cable fairings, specifications, and installation (date unknown)				
·	-					
Examine		Date	Ц			
Signature	9	Considered				

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.